# REMARKS

The Office Action dated July 23, 2008 has been carefully considered. Claims 1 and 3-15 are currently pending. Reconsideration and allowance of the present application in view of the following Remarks are respectfully requested.

In the Office Action dated July 23, 2008, the Examiner:

- Rejected claims 1, 3-6 and 13 under 35 U.S.C. § 103(a), as being unpatentable over U.S. Patent Application Publication No. US 2003/0150687 to King in view of U.S. Patent No. 5,480,348 to Mazur.
- Rejected claims 7-12 under 35 U.S.C. 103(a) as being unpatentable over King in view of Mazur and further in view of U.S. Patent No. 4,989,714 to Abe.
- Rejected claims 14 and 15 under 35 U.S.C. 103(a) as being unpatentable over King in view of Mazur and further in view of U.S. Patent No. 6,109,417 to Kovens *et al.*

## 35 U.S.C. § 103(a)

## **Independent Claim 1**

Independent claim 1 was rejected under 35 U.S.C. § 103(a) as being obvious over U.S.

Patent Application Publication No. US 2003/0150687 to King in view of U.S. Patent No.

5,480,348 to Mazur. Claim 1 discloses a coin acceptor comprising: a coin sensing station, a coin rundown path extending through the sensing station, the coin rundown path including a coin guiding surface on which a major face of the coin lies in sliding engagement during its passage along the path through the coin sensing station, wherein the path is curved such that the face of

the coin is urged by centripetal force against the coin guiding surface as it moves along the path and through the coin sensing station.

The Examiner concedes that King does not disclose a curved rundown path; but asserts that Mazur teaches coin rundown path 410 that has a curved guiding surface on which a major face of a coin slides and is urged by centripetal force as it passes sensing station 411/412, and a side wall opposite said curved guiding surface (see Figure 54) for the purpose of directing coins being processed within said acceptor. Applicants respectfully traverse the rejection and submit that the invention is patentable over King in view of Mazur because Mazur also fails to disclose, teach or suggest a curved rundown path.

In the amendment filed on January 4, 2008, claim 1 was amended to specify that: "the path is curved such that the face of the coin is urged by centripetal force against the coin guiding surface as it moves along the path and through the coin sensing station." The invention addresses the problem of coin wobble that can occur in the prior art as a coin passes through the sensing station. Coin wobble can degrade the sensor output. According to the invention, the face of the coin is held by centripetal force against the curved coin guiding surface as it passes through the coin sensing station and in this way, coin wobble is prevented.

The Examiner considers that the exit chute 410 of Mazur as equivalent to the rundown path claimed. However, Applicants respectfully submit that exit chute 410 does not provide a curved path such that the face of the coin is urged by centripetal force against the coin guiding surface as the coin moves along the path and through the coin sensing station. As shown in

Mazur Figure 54a, coin under test is ejected from a rotary disc into the exit chute 410 in a horizontal manner in a straight line not along a curve. The coin then passes horizontally along the straight portion of exit chute 410 through the second sensor ("coin sensing station"), formed by a light source 411 and a photodetector 412. Thereafter, the coin engages with curved portion of exit chute 410 and at that point is urged by centripetal force so as to turn through 90° downward to a collection point, similarly to one shown in Mazur Fig. 18. The curvature in exit chute 410 only guides the coin after the coin has already passed the coin sensing station, but does not guide the coin through the coin sensing station as claimed in claim 1. Thus, Mazur does not teach a curved rundown path urging the face of a coin by centripetal force against the coin guiding surface as the coin moves through the coin sensing station. Instead, Mazur teaches ejecting coins in free flight horizontally to be sensed by the sensing station 411, 412 and thereafter using the curved surface of the exit chute 410 to re-direct the coins downwardly toward the collection point. Therefore, the coins ejected by Mazur when in free flight almost certainly will wobble, which will degrade the action of the sensor 411, 412, particularly if an inductive sensor were used, as in King. Even if the coins do not wobble, it would be due to size of the opening of the exit chute, rather than the curved path and the centripetal force applied.

Therefore, it is respectfully submitted that Mazur and King combined do not disclose, teach or suggest a coin rundown path including a curved coin guiding surface on which a major face of the coin is urged by centripetal force to lie in sliding engagement during its passage along

the coin rundown path through the coin sensing station. Accordingly, Applicants respectfully request that the rejection of independent claim 1 based King and Mazur be withdrawn.

Moreover, as claims 3-12 all depend from independent claim 1, Applicants respectfully submit that these claims are equally allowable. Withdrawal of these rejections and allowance of claims 3-12 are also respectfully requested.

#### Independent claim 13

Claim 13 is directed to a coin acceptor comprising: a coin sensing station, a coin rundown path extending through the coin sensing station, the coin rundown path including a curved coin guiding surface on which a major face of the coin is urged by centripetal force to lie in sliding engagement during its passage along the coin rundown path through the coin sensing station, and a side wall opposite to the curved coin guiding surface, said coin rundown path extending between the coin guiding surface and the sidewall, wherein said side wall is fixedly mounted relative to the curved coin guiding surface.

Similar to the argument presented above, the combination of King and Mazur do not render claim 13 obvious and unpatentable. Although Mazur teaches an exit chute 410 that may be curved after the coins have already pass through the coin sensing station, exit chute 410 does not include a curved coin guiding surface on which a major face of the coin is urged by centripetal force to lie in sliding engagement during its passage along the coin rundown path through the coin sensing station. As shown in Fig. 54, the path for the coins in the exit chute 410 appears to be straight and flat, with a slot sized to receive the coins. Nothing in the drawing or

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the specification of Mazur teaches or suggests having an exit chute with a curved guiding surface along the coin traveling path through the coin sensing station. Nothing in King and Mazur combined discloses, teaches or suggests that exit chute 410 having a curved guiding surface that guides the coin through the coin sensing station. Reconsideration and withdrawal of rejection of independent claim 13 based on King and Mazur are thereby respectfully requested.

# Dependent claims 7-12

The Examiner rejected claims 7-12 under 35 U.S.C. § 103(a) as being unpatentable over King in view of Mazur and Abe (U.S. Patent No. 4,989,714). Applicants respectfully traverse the rejection because King and Mazur do not disclose, teach or suggest a coin rundown path including a coin guiding surface on which a major face of the coin lies in sliding engagement during its passage along the path through the coin sensing station, wherein the path is curved such that the face of the coin is urged by centripetal force against the coin guiding surface as it moves along the path and through the coin sensing station. Abe does not overcome the shortcomings of King and Mazur. Therefore, King, Mazur and Abe combined do not render claims 7-12 obvious because they fail to disclose, teach or suggest all the claimed elements of the base claim, claim 1.

#### Independent claim 14

Independent claim 14 was rejected under 35 U.S.C. § 103(a) as being obvious over U.S. King in view of Mazur and in view of Kovens (U.S. Patent No. 6,109,417). Claim 14 is directed to a coin acceptor comprising: a coin sensing station, a coin rundown path extending through the

coin sensing station, the coin rundown path including a curved coin guiding surface on which a major face of the coin lies in sliding engagement during its passage along the coin rundown path through the coin sensing station, and means to relieve a pressure differential between the major face of the coin and the curved coin guiding surface to inhibit coins sticking to the curved coin guiding surface.

First, as presented above, Applicants respectfully submit that Mazur's exit chute 410 does not include a curved coin guiding surface on which a major face of the coin lines in sliding engagement during its passage along the coin rundown path through the coin sensing system.

Second, Applicants respectfully submit that exit chute 410 does not have a curved guiding surface 410 configured to relieve a pressure differential between the major coin face and the guiding surface. There is no teaching, disclosure or suggestion that the exit chute 410 contains holes or other means to relieve the pressure differential that may occur between the coin and the surface. Kovens does not cure this deficiency. Although Kovens discloses apertures 44, these apertures are in the floor 18 of the coin race 12 and the floor 36 of the coin race insert 30.

As stated in Kovens specification, "[a]pertures 44 serve to prevent salting by draining liquid that may find its way into the coin entrance 24 before the liquid reaches the electronic components of the coin acceptance assembly." Kovens Col. 4, lines 38-42. This language makes clear that the apertures in Kovens are for discharging liquids and have no purpose in relieving a pressure differential between a curved guiding surface and a major surface of the coin. The only pressure relief is for the discharger of the liquid. Applicants respectfully submit that a person ordinary

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skilled in the art would not find holes for draining liquids as teaching or suggesting that holes can be used for relieving a pressure differential in the specific configuration of a curved coin guiding surface used for guiding the major surface of a coin through a sensing station.

# CONCLUSION

Based on the foregoing amendments and remarks, Applicants respectfully request reconsideration and withdrawal of the rejection of claims and allowance of this application.

We also enclosed herewith the certified copy of Great Britain Patent Application No. GB0307880.5 from which this application claims priority.

The Commission is hereby authorized to charge any additional fees which may be required for this response, or credit any overpayment to Deposit Account No. 15-0665, Order No. 020305-004006.

> Respectfully submitted, ORRICK, HERRINGTON & SUTCLIFFE LLP

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